

**Amendments to the Specification:**

Please amend the paragraph at page 8, line 29, through page 9, line 8, as follows.

While one can use multiple detectors and electromagnetic radiation sources (e.g., laser for laser induced fluorescence), it has been found by the present inventors that one or more, preferably two, acousto-optic modulators in conjunction with an aperture is particularly suitable for providing two different detection zones from a single laser source. An acousto-optic modulator is readily available from a variety of sources including ~~at the world wide web at~~ **brimrose.com/acousto\_modulators.html** Brimrose Corp. Baltimore Maryland, which also ~~includes~~ **provides documents with** a general discussion on the theory behind acousto-optic modulators (~~Brimrose Corp., Baltimore, Maryland~~). Other devices which is capable of guiding the laser beam into two or more different positions can also be used instead of an acousto-optic modulator. Such devices are well known to one of ordinary skill in the art and include rotating mirrors, gratings and other electromagnetic wave diffracting devices. The aperture allows emission of only one particular diffracted beam to illuminate the detection zones and blocks other diffracted laser beam.

Please amend the paragraph at page 22, lines 2-4, as follows.

Lambda phage DNA (GIBCO) was diluted in buffer (Tris EDTA, pH 6.8 with 5 mM NaCl) and stained with the intercalating dye C<sub>49</sub>H<sub>58</sub>L<sub>4</sub>N<sub>6</sub>O<sub>2</sub>, marketed as YOYO<sup>®</sup>-1 (Molecular Probes) at a stoichiometry of one dye molecule per 4 bp.